IN THE CLAIMS

1 (Previously Presented). An apparatus comprising:

a dielectric layer;

an adhesion layer comprising hemispheric grain polysilicon overlying the dielectric layer; and

a phase-change material overlying the adhesion layer.

2 (Previously Presented). The apparatus of claim 1, wherein the adhesion layer is on the dielectric layer.

3 (Original). The apparatus of claim 1, wherein the phase-change material is on the adhesion layer.

4 (Original). The apparatus of claim 1, wherein the adhesion layer consists essentially of silicon.

5 (Original). The apparatus of claim 1, wherein the adhesion layer comprises at least forty percent silicon atoms by weight.

Claim 6 (Canceled).

7 (Original). The apparatus of claim 1, wherein the adhesion layer comprises three dimensional grains.

Claims 8-10 (Canceled).

11 (Previously Presented). An apparatus comprising:

an adhesion layer comprising silicon having a rough surface; and

a phase-change material on the adhesion layer.

Claim 12 (Canceled).

13 (Previously Presented). The apparatus of claim 11, wherein the adhesion layer comprises hemispherical grain polysilicon.

14 (Original). The apparatus of claim 11, wherein the adhesion layer has a surface comprising bumps having an average height of at least 30 Angstroms.

15 (Original). The apparatus of claim 11, further comprising a dielectric layer, wherein the adhesion layer is on the dielectric layer.

16 (Original). The apparatus of claim 15, wherein the dielectric layer comprises silicon dioxide or silicon nitride.

17 (Original). The apparatus of claim 11, wherein the phase-change material comprises a chalcogenide alloys.

18 (Original). The apparatus of claim 17, wherein the phase-change material comprises GeSbTe alloys.

19 (Original). A method comprising:

forming an interfacial layer having three dimensional grains; and

forming a phase-change material over said interfacial layer.

20 (Original). The method of claim 19, wherein forming an interfacial layer includes forming an interfacial layer over an insulator.

21 (Original). The method of claim 19, wherein forming the interfacial layer includes forming a layer having hemispheric grains.

22 (Original). The method of claim 19 wherein forming an interfacial layer includes forming a layer comprising silicon.

23 (Original). The method of claim 19 further including forming the interfacial layer over a layer of dielectric material.

24 (Currently Amended). The method of claim 23 further including forming an opening through said interfacial layer and said dielectric material ~~insulator~~.

25 (Original). The method of claim 24 further including forming the phase-change material over the interfacial layer and in the opening.

26 (Currently Amended). An apparatus comprising:

an adhesion layer having bumps of at least 30 Angstroms ~~a rough surface~~; and

a chalcogenide phase-change material on said ~~the~~ adhesion layer.

27 (Previously Presented). The apparatus of claim 26 wherein said adhesion layer includes silicon.

28 (Previously Presented). The apparatus of claim 26 wherein said adhesion layer comprises hemispherical grain polysilicon.

29 (Currently Amended). An apparatus comprising:

an adhesion layer having bumps of at least 30 Angstroms ~~a rough surface~~;

a dielectric layer, said adhesion layer on the dielectric layer; and

a phase-change material on the adhesion layer.

30 (Previously Presented). The apparatus of claim 29 wherein said adhesion layer includes silicon.

31 (Previously Presented). The apparatus of claim 29 wherein said adhesion layer comprises hemispherical grain polysilicon.

32 (New). The apparatus of claim 26 wherein said adhesion layer includes polysilicon.

33 (New). The apparatus of claim 29 wherein said adhesion layer includes polysilicon.